

Accelerator Group Status

Scenarios and Stakeholders

Scenarios

1. US-supplied instrumentation, such as a Schottky detector.
Jean Slaughter
2. Tools development at FNAL.
Suzanne Panacek/Elliott M.
3. Analysis from CERN perspective.
Mike Lamont
4. Magnet testing during hardware commissioning
Mike Lamm
5. Beam commissioning, unobtrusively observing first beam in the LHC.
Elvin Harms

Scenarios

6. Routine maintenance on the beam of an injector. For example, closing the orbit of the LHC injector (SPS??), which would presumably need to be done at “regular intervals”. Other maintenance items could be contemplated in this vein, like tuning the injection to the “clockwise” half of LHC while the CERN control room tunes the injection to the “counter-clockwise” half.
7. Investigating a quench.
8. Monitoring the beam through the synchrotron light monitors and reacting when “things go bad”.

Stakeholders

Stakeholders	Scenario							
	1	2	3	4	5	6	7	8
FNAL accelerator expert (working on LHC - LARP)	x		x	x	x	x	x	x
FNAL accelerator control room expert	x	x		x	x	x	x	x
FNAL accelerator hardware designer	x			x	x		x	
FNAL accelerator software designer	x	x			x			
FNAL accelerator management	x	x		x	x	x		x
CERN accelerator expert	x		x	x	x	x	x	x
CERN accelerator control room expert	x	x	x	x	x	x	x	x
CERN accelerator hw designer (i.e.magnet)	x			x	x			
CERN accelerator sw designer	x	x	x		x			
CERN accelerator management	x		x	x	x	x	x	x

Remop vs. working in office

For what reasons should one go to the Remop vs. staying in the office?

- CERN's direct link to FNAL expertise
- Guaranteed response time from FNAL to CERN questions. (Dispatching to FNAL experts)
- Centralized communication to LHC so that not everyone calls the LHC when there is a problem
- Stable hardware and software that is up to date and synchronized with the LHC.
- Multiple high quality, large monitors. Video conferencing, phone connections.
- Security, few and controlled holes in the firewall.
- Social aspect of working together is very important (see CDF, Minos)
- Collaborate on beam studies (with CERN or with multiple US Collaborators)
- Passive vs. intrusive studies. Passive study needs auxiliary information displayed on multiple monitors.
- Intrusive study need token and coordination with LHC.
- Ask questions (help desk for LHC related questions)